

INSPECTION AND DOCUMENTATION
OF
PORTLAND CEMENT AT CONCRETE BATCHING PLANTS

I. SCOPE

This Method describes those procedures necessary to determine the acceptability of Portland Cement at concrete batching/mixing facilities. These procedures were formerly contained in Materials Method N.Y. 10.0 dated June 21, 1967 and have been redesignated as Materials Method N.Y. 10.3 under the inspection program for portland cement instituted with Materials Method N.Y. 10 dated June, 1971.

II. GENERAL METHOD

All cement used in Department work must be from a Mill location shown on the "List of Approved Cement Mills" issued by the Materials Bureau. Cement from those Mills approved to supply under a certification program (Paragraph "A" of Approved List) must be accompanied by a cement shipment authorization executed and signed by the Manufacturer. Cement from Mills approved to produce and supply under Department inspection (Paragraph "B" of Approved List) must arrive in a vehicle sealed by a Department representative and be accompanied by a cement shipment authorization executed by the Department representative. The presence of these forms and/or seals constitute the evidence of acceptability of the cement at the time of arrival. When deliveries arrive during periods of non-inspection, each producer keeps a log of accepted deliveries and defines their storage location within the plant in relation to any non-accepted deliveries. Satisfactory log data, along with a random sampling system at the plant, constitute evidence of acceptability of the cement at the batching plant. However, cement in storage at batch plants may be intensively sampled at any time as deemed necessary by the Region.

III. DELIVERIES UNDER CONTINUOUS INSPECTION

When cement is received during working hours and the plant is under continuous inspection, the Inspector obtains the documentation (BR-44 or BR-280) accompanying the vehicle, checks the presence of intact lead car seal when necessary, and verifies from the "List of Approved Cement Mills" that the Manufacturer is approved to supply cement with the documentation used. The Inspector shall ascertain that only this cement is added to mixes produced for Department projects. The Regional Director shall determine, depending on individual plant conditions, whether or not the cement intakes on the batch plant should be sealed during working hours or if delivery vehicle seals, when required, should be broken only by or in the presence of the Inspector.

IV. DELIVERIES WITHOUT CONTINUOUS INSPECTION

At times, when the Inspector is not present, or when a plant has not been under continuous inspection and it is not feasible to provide plant inspection of deliveries prior to start-up, the Producer shall maintain a log of cement deliveries along with received copies of either Form BR-44 or BR-280. The log shall include information as to all received deliveries of both Department and commercial cement, and the bins or storage silos to which they were consigned. Records of deliveries must include brand, supply location, type, quantity and date. Examination of the log, along with received copies of Form BR-44 or BR-280 for the batch plant Inspector's records, will constitute initial evidence of acceptability of the cement on hand upon his arrival at the plant. The log shall cover a period of time sufficient to fully document the cement on hand.

In addition, those plants receiving shipment of both Department and commercial cements during the periods of non-inspection shall certify that either:

IV. DELIVERIES WITHOUT CONTINUOUS INSPECTION (cont'd)

- A. Plant personnel were present to receive the shipment and check the loading procedures as evidenced by their signature and time of receipt noted on the invoice.
- B. Some other method as approved by the Materials Bureau was in operation to insure that deliveries were made into the proper storage bins or silos.

V. SAMPLING

- A. The Inspector shall sample the cement whenever the above documentation appears inadequate in any way to him, and at any other time as determined by the Regional Director.

Once the need for such sampling has been determined, the first sample shall be taken as soon as possible. Subsequent samples shall be taken thereafter at an approximate rate of one sample per two-hundred cubic yards of concrete batched from that plant. Sampling shall continue until it has been determined through one or more of the above procedures that there is adequate evidence of acceptability for the cement as batched. In any case, a sample of cement is hereby defined as representing all cement batched from the time of its sampling until the time of the next sampling or assurance of acceptability, whichever occurs first.

A separate one quart and one gallon sample shall be taken for each sampling from a point as near as possible to the discharge of the cement into the batch. The quart samples shall be forwarded to the Materials Bureau for test. The one gallon samples shall be retained at the plant or Regional Office until further instructions are received from the Materials Bureau. It shall be the responsibility of the Producer to

V. SAMPLING (cont'd)

provide adequate sampling facilities. All equipment used to procure the samples shall be thoroughly clean before use. Containers must be clean and dry and may be either friction top metal cans, glass screw top jars, plastic bags or other containers capable of being securely fastened. The bituminous sample Form (BR-170) may be used to identify the sample with distribution as described on the form.

- B. All cement for Department use stored at batching facilities over the winter must be sampled for testing and acceptance by the Materials Bureau prior to its incorporation in Department work. A one gallon sample shall be obtained from this cement and forwarded to the Materials Bureau in suitable containers accompanied by a completed Form BR-240 noted "Winter Storage Sample."
- C. In addition, destination samples are to be obtained when directed by the Materials Bureau in accordance with Materials Method N.Y. 10.

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